#### President Appoints DA Undersecretaries

PRESIDENT CORA-ZON C. AQUINO recently sworn into office five new Undersecretaries, in line with the department's reorganization program under Executive Order No.

Appointed Undersecretaries are Roberto W. Ansaldo for Policy and Planning, Dante Q. Barbosa for Staff Operations, Apolonio V. Bautista for Regional Operations, Carlos A. Fernandez for Special Concerns, and Conrado C. Gozun for Attached Agencies.

All the appointees have been with the De-See President p.6

#### Clear-cut Policy of Fisheries Urged

THE DEPARTMENT OF AGRICULTURE is committed to the task of making farmers and profitable. fishermen This commitment was reiterated by Agriculture Secretary Carlos G. Dominguez during the National Conference on Fisheries Policy and Planning in Baguio City.

In his opening remarks, Secretary Do-See Clear Cut p. 6

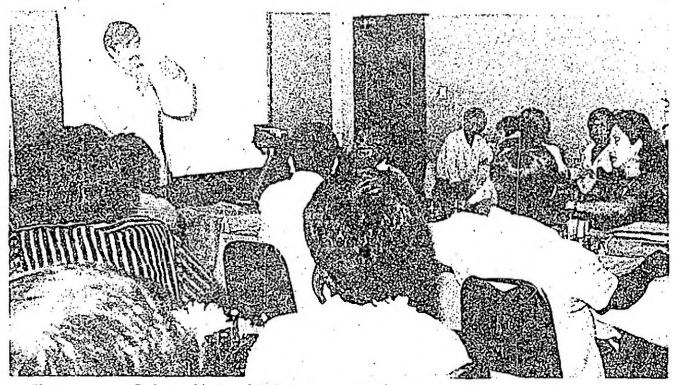
#### Dominguez opens Cebu's Agri Fair

AGRICUL TURE SECRETARY Carlos G. Dominguez envisions . the day when farmers can leap, from subsistence to enterprise farming through available. technology and market.

before Speaking guests and exhibitors in Cebu's Agri-Aqua Live-See Dominguez p. 6

## DA's Priority:

# Farmers' Profitability



Undersecretary Roberto W. Ansaldo underscores the importance of increasing farmers' income as he explains the Farmers' Profitability Program to the Bureau Directors, Regional Directors and other officials during the management conference at the Asean Institute of Tourism recently,

#### President's Speech at Agri Fair

## Cory's Special Battalion

GRATULATE the orgganizers of the Agri-Livestoek and Aqua Poultry Fair.

I welcome its hold-

MAY I FIRST CONG- ing for it emphasizes our determination that agriculture shall be the lead sector in our national economic recov-

President Aquino delivers the keynote speech. during the opening of the Agri Aqua Livestock and Poultry Fair at the Phileite, recent-

The highest priority given to agriculture follows from our first objective in government the alleviation of mass poverty in the countryside where the vast majority of Filipinos live. Our aim in a short plirase is to make farming pay for the far-

We are counting on the Department of Agriculture to provide the services and prepare the necessary policies to achieve this goal.

Some of its policy recommendations have already been adopted, such as the liberaliza-

See Cory's p.6

#### INCREASING FAR-MERS' INCOME and the quality of life rather than increasing productivity was presented as the Department of Agriculture's goal in uplifting the plight of the rural sector during the DA's management conference at the Asian Institute of Tourism recently.

Addressing key officials, regional directors and heads of attached agencies, Secretary Carlos G. Dominguez affirmed this position and cited the importance of increasing farmers' income to motivate them to accelerate rural development.

Undersecretary Roberto W. Ansaldo, on the other hand, under-See Farmers p. 6

#### On the proposed levy

AGRICUL, TURE SECRETARY Carlos G. Dominguez expresses alarm over what he describes as an esealating trade war refrom sulting planned imposition by the European Economic Community (EEC) member nations of additional levy on agricultural products bought from Third World eountries.

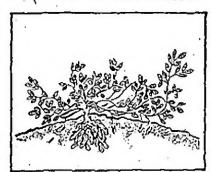
Dominguez told the European Chamber of Commerce of the Philippines in its recent meet-

ing that member countries of the EEC are bent on imposing a levy on imported vegetable oil, despite mounting opposition from exporters, including the United States.

The levy, pegged at \$370 per metrie ton if approved; is expected to dislocate a significant portion of ecconut oil export 45 percent of which goes to Western European countries.

Philippine Agrieultural Attache to EEC, See EEC p.6

## What's inside



Peanut



E. BAQUIZAL



M. LANTIN



B. ESTACIO



P. GABALDON



Kabute p.8

Meet the new Assistant Secretaries p.4



## EDITORIAL

## Refocussing of Priorities

In support of Pres. Corazon C. Aquino's commitment to accelerate the development of the countryside to alleviate mass poverty and improve the quality of life of the farmers, the Department of Agriculture has refocussed its priorities and has made "Farmers' Profitability" its main thrust. Instead of pursuing a program of increased productivity, the Department of Agriculture opts to qualify its goal and make the farmer its main client.

We are aware that farmers comprise 70 percent of the 54 million Filipinos living in the countryside. It is also a known fact that farmers are one of the lowest wage earners in the country. As it is, farm families reportedly earn abount PI,600 a month and this is considered way below the poverty line.

With this stark reality facing us, the present government who is deeply concerned with the plight of the farmers has re-assessed its program. of activities. It reviewed and amended existing policies and structures that concern agricultural and rural development to support the development of the countryside.

Developing agriculture was given top billing not only to make possible equitable distribution of benefits and opportunities but also to enable the people in rural areas to maximize their eontributions to the economy.

To make this possible, a genuine land reform program that includes a package of eredit, marketing and technological support needs to be implemented. Likewise, investment will be encouraged in labor-intensive, rural-based and small-andmedium seale agriculture enterprises.

## Management Supports IPM

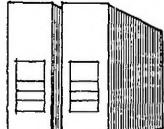
AGRICULTURE UN DERSECRETARY Apolonio Bautista underscores the importance of integrated Pest Management (IPM) and pledges top management support for its projects during a threeday seminar-workshop on "Recent Advances in Integrated Pest Management for Priority Crops in the Philippines" at Venus Hotel, Baguio

The workshop was undertaken by the Department of Agriculture through the coordination of Damaso Callo

and Thelma "Ting" Reyes of regional field operations. Agriculture officials, regional offiscientists cers, members of the academe attended the work-

IPM is a system of eontrolling insect pests and diseases with the use of resistant varieties, biological and cultural methods and the judicious use of pestieides with the objective of maximizing farmers' yield at reduced costs.

The workshop eited the need for a regular, See IPM p.6



ORDINARY PEO-PLE, we see them. But they are just as important! They make things easy for us although we may not fully realize it. They are the utility personnel who are sometimes referred to as the "vacuum brigade" and the minor employees who contribute to the smooth running of the organization.

And yet, we don't know them. They may be our nodding acquaintances, yes, and that have bolstered may their old and tired spirits. But still, does anybody among us ever care to ask their names and trade a little old joke or two?

Undersecretary Bobby Ansaldo himself acknowledges their small and yet significant contribution to the farmer's profitabiltiy program. But again, did we ever care to really know them?

One such fellow is Oscar H. de Cruz, or simply Mang Osear. At 56, he's as energetic as anybody else in his 30's. A native of Baliuag, Bulaean, he barely finished his high school. Married to Victoria R. Cruz, they have luckily, only a son, Francisco, to support, who now, is college journalism freshman at Polytechnic

DA-FILE

University of the Philippines (PUP).

He started in the DANR as casual janitor in 1960, then assigned as temporary gardener, elevator boy (or man) only to be reassigned as janitor, but this time with a permanent status. He was promoted as senior janitor when his former supervisor died. However, he still receives the same salary as any ordinary janitor. "Posisyon lang naman ang tumaas eh, hindi ang suweldo," he laments, yet he continues to perform his job diligently.

The 15 per cent salary increase hardly matters as he knows he still has to come to the office with only "pamasahe" in his pocket. In a not so isolated case, he has to borrow money for his lunch in the office.

But he is determined to let his son attain a college degree even if it теалѕ belt-tightening for the whole family. He wonders how he manages to give P25 a day allowance despite his measly salary of P600 a month.

That's Mang Oscar. He may be short of cash but not of dreams and convictions. Real people, indeed.



**CRUZ** 

His face lit up and broke into a smile when told he will be featured in AGGIE TRENDS. "This is my 40th year here in the Department of Agriculture and this is one of the rare instanees when I will be put in the limelight," said Mr. Lorenzo C. Yangco, the DA's "roving" em-

Awarded the Most Outstanding Employee in 1979, this coming August he will mark his forty years of service in the DA where he started working in 1947, in what was known then as Department of Agriculture and Commerce.

ployce.

His work, he admits, is messengerial in nature. He is the one incharge of following up papers, mailing personal as well as official letters; and a host of other bureaucratic paperchase. Helpful and always ready with a smile, you can count on him when eomes to letters, packages and the sort, at the Bureau of Posts. And this one is for



YANGCO

the books! Mr. Yangco, at his age finds hiking from SM, EDSA to the office, a healthful exercise. And he does that five times a week! You can eheck his time card as he punches his card as early as 6:30 AM. He probably, is one of those rare guys who will report to the office eome hell or high water. And this caused him forfeiture of his leave

A physical buff, he is a biking aficionado during weekends as he believes being idle makes him prone to illness,

Childless, Mr. Yangco and his wife Lucia live in Malabon.

His salary may not be enough but he is quick to console himself that : he has never been sick. Mr. Yangeo believes life. has been good to him as he can pay his taxes and he and wife can still eat three square meals a day.

So simple a lifestyle but that what makes him happy. (RVL)

### DA and GFSME Launched Joint Guarantee Scheme for Agric'l Loans

The Department of Agriculture (DA) and the Guarantee Fund for Small and Medium Enterprises (GFSME) formally signed a Memorandum of Agreement for the design, funding and complementation of a. distinct and special eredit delivery program for small and medium scale agricultural and agribusiness ventures.

Under the agreement, One Hundred Million Pesos (P100 Million) from the Comprehensive Agricultural Loan Fund or CALF shall be provided by the Department of Agriculture as an initial seed fund which shall be used primarily for

guarantee support under the existing guidelines of the GFSME. The P100 Million in effect "augments the existing resources of GFSME, thus enabling it to expand its activespecially for

See DA p.6

#### National Seed **Promotion** Training Launched

THE FIRST NA-TIONAL SEED PRO-Training MOTION Course was held recently at the Maligaya Rice Research Training Center (MRRTC) in Nueva Ecija.

This training course is intended for the extension workers of the Department of Agriculture "to promote and inerease the use of improved and certified See National p.7

#### El Niño Cracks Aggie Sector...

"DROUGHT DESof agricultural crops," screamed the headline of one of the newspaper dailies in the country.

Actually, this drought has been a usual occurrence in almost all parts of the globe since 1935. This was the year when the so-called "El Nino" phenomenon, a spectameteorological cular phenomenon that develop in the Pacific, most often off Peru, started to sow its wrath which is characterized not only by drought but also strong and devastating rains coupled with furious winds. The phenomenon usually lasts for

See El Niño p. 7

#### Aggie Output Drops...

Noticeable nosedive in agricultural production since the dry spell took place in January has shook the entire farming sector in the country. The supply and demand situation on the basic agricultural commodities became shaky and prices volatile.

According to the initial report of the Department of Agriculture. the drought has ravage a total of 111,350 hee tares in some 10 provinces and damaged palay and corn crops worth P248.76 million. Severely hit by the drought are the corn areas affecting 97,320 hectares with production decline to 48,823 metric tons or 48.82 million kilos. With the

See Output p.7



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## CROP DIVERSIFICATION

# Go with peanuts

AGGIE TRENDS

PEANUT, known locally as "mani" is also ealled ground nut, monkey nut and in other countries, goober. It is a legume erop rich in energy, high in protein and oil contents. One eup of roasted peanuts has an energy value equivalent of five cups of milk, eight eggs, and 27 medium-sized bananas.

Bureau of Agricultural Economics data in 1985 showed that the total area planted to peanut was 45,960 heetares with a total production of 42,302 metric tons of unshelled peanut.

In 1984, the national average yield of peanut was 0.92 metric ton per heetare far below the potential of 1.5 to 2.5 metric tons per heetare of improved varieties.

#### USES

In the Philippines, peanut is consumed as snack food in various forms and made into confectionery preparations, both for local consumption and for export.

Refined peanut oil is used in making cooking oil, salad dressing, margarine and shortening. It is also used as base in eosmetic preparations such as face creams and hair lotion. Crude peanut oil is likewise used in the manufacture of soaps and detergent.

Peanut ranks high among the highly "farmable" agricultural erops. It performs well if intereropped with corn, okra, sugareane, tomato and other vegetable erops. It can also be planted together with perennials like coconut, papaya, citrus and other plantation erops.

#### SOIL AND CLIMATE

Peanut thrives best in leep, well-drained, wht-textured soil such as loam, silt-loam, silty elay loam, sandy loam and sandy elayloam. Unlike other leguminous erops, the nut or fruit is developed below the soil surface from a peg that enters the soil from leaf axil of

the plant.
Soil should be moderately to slightly acidic with pH range of 5.8 to

6.2. This condition enables the nitrogen-fixing bacteria (Rhizobium) to supply wholly or partly the nitrogen needs of peanut plant.

#### **CULTURE**

Land preparation — Prepare field thoroughly to control weeds, produce good soil tilth for uniform emergence and early establishment, and to provide for better soil-water retention.

One to two weeks before planting, plow and harrow field two to three times. Plow field 15 to 20 cm. deep to cover plant residues and to minimize stem and pod disease infestation.

Plant Density and Planting Methods During wet season, when plants grow tall and vegetate profusely, a plant population of 200,000 plants per 100 kg. seed per hectare is desirable. In dry season, a higher rate of 250,000 to 300,000 plants per 150 kg. seed per heetare is recommended.

The two methods of planting peanuts are:

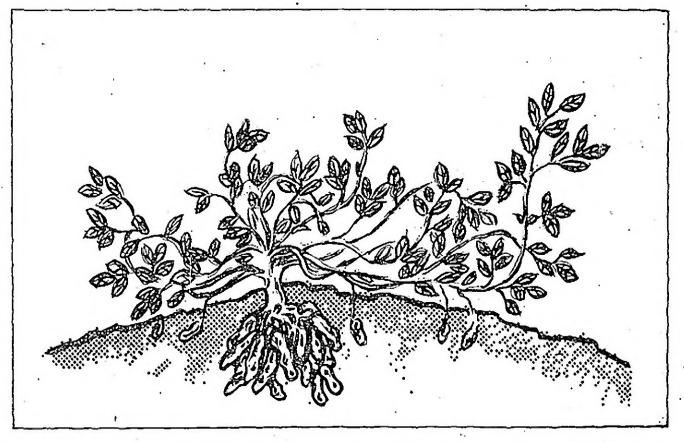
1) Drill — This is done by sowing seeds singly in previously laid out furrows spaced 50 em. apart for bunch type and 75 em. apart for runner type.

2) Hill — This is done by sowing seeds in hills: for 50 em. row spacing, 2 sceds per hill at 20 cm. between hills; for 75 cm. row spacing, 3 seeds per hill at 20 em. between hills.

Planting Months — Wet season crop is planted from the last week of May to mid-June; for dry season crop, immediately after harvest of wet season crop or from last week of September to early October. If water is available, a third crop can be planted in early February.

Peanut may be planted by hand or by the use of machine mounted on tractor.

Fertilization — The general recommendation is 3 bags (50 kg./bag) of Solophos and 1 bag muriate of potash per hectare plus inoculation with Rhi-



zobium strain. Four bags of 14-14-14 can also be used per heetare. Drill fertilizer evenly at the bottom of furrows and cover with 2-3 em. of fine soil.

Weed Control — Weed by using hand hoe or apply shallow cultivator using animal-drawn eultivator between furrows 10 to 15 days after plant emergence. Dust plants with ealcium sulfate at 300 kilos per hectare. Dust when leaves are dry.

Hilling up — Because peg will not develop unless it is in contact with the soil, hill-up plants 40-45 days from emergence. Take extra eare to prevent damage to blooms.

#### HARVESTING

Peanuts are harvested at maturity. If harvested too early, shrunken and poor quality beans are produced. If too late, pods may rot and beans germinate right in the field.

Peanuts are ready for harvest when leaves start to wither and turn yellow. Maturity date of variety usually grown ranges from 100 to 120 days after planting. Another indication of maturity is when pods become hard which can be detected by pressing pods with fingers.

Harvesting is done by pulling the entire plant in a hill or passing a plow to loosen soil bc-

fore pulling. If harvested during dry season, newly harvested peanuts are dried under the sun for three days in windrows. Then handpick, clean and sort dried pods before storage. If harvested during rainy days, handpick pods from plants soon after harvest.

## DRYING, SHELLING AND STORING

Freshly harvested pods contain 30 to 35% moisture content. Soon after harvest, dry pods to safe moisture level to prevent fungi infection and seed deterioration. Unshelled pods maybe sundried two to five days until beans become

loose within pods for safe storage before shelling.

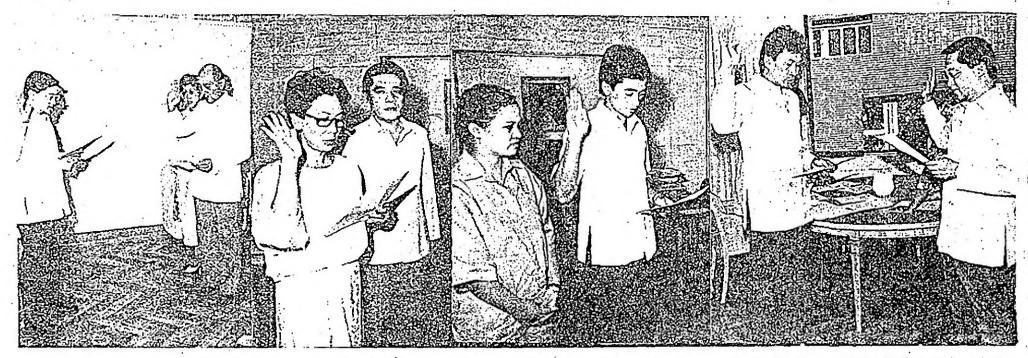
Peanuts should be carefully shelled to avoid rupturing seed-coat or breaking cotyledon. Peanut is ordinarily shelled by hand, which is time-consuming and expensive.

A number of manually operated or small engine-powered portable peanut sheller has been satisfactorily designed and produce good results. Prototypes of portable peanut sheller are available at the Bureau of Plant Industry, Engineering Division, San Andres, Manila or at UPLB Post-Harvest Department in Los Banos, Laguna.

#### Recommended Philippine Seed Board Varieties of Peanut

Variety	Maturity	Yield (MT/ha.)	Shelling	Disease
	(days)	(unshelled)	%	Reaction
				*
1. EG Bunch	105-110	1.8-2.1	70	Susceptible to
		•		Cercospora leaf spot (CLS) & rust
2. BPIP9	104-110	1.8-2.1	68	- do -
3. CES 101	104-110	1.8-2.1	70	- do -
4. UPL-Pn2 (Moket)	104-110	1.8-2.1	72	- do -
5. UPL-Pn4 (Biyaya)	105-110	2.0-2.5	65	Resistant to CLS and rust
6. UPL—Pn6 (Biyaya)	101-102	1.76-2.32	68	Moderately resistant to
(Diyaya)	.4		•	CLS and
				resistant to
				rust
	· ·			





Secretary Carlos G. Dominguez inducts into office (from left to right) Pelagio Gabaldon, assistant secretary for agribusiness; Editha V. Baquizal, assistant secretary for support group; Manuel Lantin, assistant secretary for production; and Benito F. Estacio, Jr., assistant secretary for planning and monitoring.

## Meet the new officials

THE LADY IS an assistant secretary. That's Editha V. Baquizal, the former boss of Financial and Management Service. Starting as illustrator in the Agricultural Information Division, Department of Agriculture and Natural Resources she rose to become the Assistant Secretary for support group after thirty-four years of indefatigable service to the government.

A master of Public Administration, transferred to the Ministry of Budget wherein she worked as classification analyst until she moved back to DA and became the chief of the management division from October 1974 December 1977. Later she was named Assistant Staff Service Chief Ill from January 1978 to December 1980. From January 1981 to March 24, 1987, she held the position of chief of the Financial and Management Serpointed assistant secretary for administration taries. and finance.

She had attended training and scholarship grants here and abroad

at Cornell University, Ithaca, New York, 1CA trainer on agricultural information 1955; WAPCO, Dept. of Budget and Management, Salary Survey Workshop 1971; University of the Philippines, financial management and accounting, 1976; Development Academy of the Philippines, Junior Executive Training, 1976 and Career Executive Service Training Program 1978; United States Dept. of Agriculture, Management of Change-Case; Western Reserve University, Cleveland, Ohio, 1980; and participated in the agribusiness study tour in Korea and Japan.

Married to Atty. Leonardo A. Baquizal, Jr. former regional trial judge of Masbate, they have three daughters.

MANUEL M. LAN-TIN, a member of academe, joins the Department of Agriculture as assistant secretary for production. A native of Malvar, Batangas, ASec. vice until she was ap- Lantin is one of the youngest assistant seere-

A UPLB eum laude National B.S. Agriculture grad- Test for Corn and Soruate, major in Statis- ghum; Team Leader ties, he has an M.S. in Corn and Sorghum

Planting Breeding at the same university. He took his Ph. D. in Plant Breeding at the lowa State University, Ames, lowa, U.S.A.

Besides being assistant secretary, he is also the chairman of the Department of Agronomy, University of the Philippines, Los Banos. His work experiences incclude Research Assistant, Dec. 1971 to June 1972; Instructor II – IV July 1972 to May 1980; Assistant Professor, June 1980 to present; Deputy Director, Institute of Plant Breeding, UPLB and eo-worker/ study leader for Breeding Researchers in Sugarcane.

Having assisted in eom breeding projects during his doctorate studies at Iowa State University, U.S.A., he has become involved in corn projects as Program leader, Corn and Sorghum Program, IPB, UPLB; Chairman, Corn and Sorghum, Technical Working Group, Phil. Seed Board 1982 to 1986, Project Leader, Cooperative

Commodity Research Team, PCARRD 1985 to present; Chairman, Expanded Corn Program, Subcommittee on Technology, NFAC, 1985; Member, Maize Working Group, Int. Board for Plant Genetic Resources (IBPGR)

He has attended training, scientific/technological conferences, seminars, study and scholarship grants. Among them, the Rochefeller Foundation Scholarship Grant for Ph. D, March 1977 to May 1980; travel grant, to visit C1MM YT Maize Program, CIM MYT, Mexico, June 15, 1980 and July 23 to Aug. 24, 1982; participant, First CIMMYT Asian Regional Maize Workshop, Bangkok, Thailand Oct. 4-10, 1981; resource speaker, UNESCO training program for teaching plant breeding, UPLB Oct. 1980; resource speaker and participant, Workshop in Varietal Improvement of Upland Crops for Intensive Cropping System, 1PB, April 15-17, 1982, IRRIdiscussant, National Aeademy of Science Fourth Annual Scientífie Meeting, PICC July

14, 1982; resource speaker, Corn Specialist Training Program, USM 1982; and resource speaker, UPLB Corn Conference, UPLB June 1983.

He has also written, co-authored a total of twenty-one publications. Asec. Lantin is married to Elsa A. Arsesal and they have two children.

ASSISTANT SECRE-TARY Benito F. Estacio, Jr. is a Bachelor of Science, Major in Economies graduate of Ateneo de Manila University in 1965, where he also finished his masteral degree in 1968. He also took up studies on Training Program in Development Economics at the University of the Philippines in 1969. In 1971, he was awarded a diploma with honors, on International Course in Regional Industrial Development for Executives of Research Institute of Management . Science Netherlands.

Ascc Estacio was an Special Assistant in the Office of the Ministry of Natural Resources from December 1986 to

February 1987. March 1987, he also held the same position in the Office of the Secretary of the Department of Agriculture until he was appointed Assistant Secretary for Planning and Monitoring Group in March

From July 1986 to December 1986, he was a consultant in the Speeial Projects Office of the Ministry of Agriculture and Food. He was the Vice-President of the Corporate Planning Service Group from July 1986 to December 1986 and also of the Community Organization and Resource Development Division from January 1, 1983 to October 31, 1986 of the University of Life. He was the Deputy

Director of KKK Community Service Group from January 1, 1982 to March 1983 and Chief Consultant of the Human Settlements Development Corporation from January 16, 1980 to December 31, 1981. He became the Director of the Program Management Office, Human Development and Community Management Program from August 19, 1980 to November 30, 1981.

Assistant Secretary Estacio comes from Pateros, Metro Manila where he was born on October 31, 1944 to Benito R. Estacio, Sr. and Purificacion Flores (both deceased). He married the former Rosario Vizcarra and they are blessed with five children, 3 girls and two boys.











Key officials in DA: Emmeline Huang, Head Executive Assistant; Atty. Lourdes Santos, chief, Administrative Service; Marinela Castillo, chief, Planning Service, Myrna Asuncion, chief, Computer Services Center and Guillermo Prat Jr., chief, Financial and Management Service.

## Regions on the go

#### REGION 2

#### **REGION 4**

TUGUEGARAO, CA-GAYAN. A new cropping pattern to increase productivity and farmers' income in rainfed lowland areas of Cagayan Valley has been developed recently by the Regional Integrated Agricultural Research System (RIARS),

The improved cropping pattern consists of planting mungbean (mungo) or directsecded rice before the main rice crop of the wet season. The traditional practice of farmers in these areas is to fallow (rest the land) during dry season and plant rice during wet weason.

RIARS reported that pilot farmer-cooperators who planted mungbean and rice as first and second crop (1985-86 wet and dry season) realized a net income of P9,000 per licetare compared to P3,000 net income of farmers who plant only one crop.

It was also reported that, in their verification trials during the same period, directseeded rice followed by transplanted rice gave a combined net income of P16,000, which is more than five times the P3,000 net income of monocrop farmers.

Region 2 director Gumersindo D. Lasam urged RIARS staff to executerate technology derification activities and to intensify piloting ticular municipality on of fine-tuned cropping pattern and matured component technologies. (Ernesto C. Macabiog)

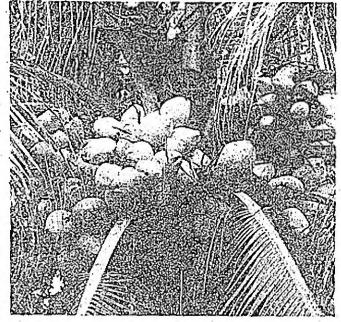
**BATANGAS** THE provincial government, through the office of the provincial agriculturist, recently launched the "Lipat-Salin ng Teknolohiya sa Pagsasaka" with its inaugural implementation in the municipality of Laurel.

Provincial Agriculturist Rogelio Ramos said that this provincewide program is designed to teach farmers modern and appropriate farm technologies to speed up countryside development.

"The concept behind this program is to facilitate the transfer of inputs of agricultural reinstitutions search which, ironically in the past, were mostly availed of by multi-national agri-business corporations and were not within the reach of small farmers particularly in the remote barangays, Ramos pointed out.

To date, seventeen municipalities in the province have hosted the initial phase of said program, to wit: Laurel, Agoncillo, Balete, San Nicolas, Balayan, Sto. Tomas, Lobo, Bauan, San Pascual, Nasugbu, Tuy, Lian, Calatagan, Libaan, Taysan, Padre Garcia, and Ma-

The first step consists of dialogues between officials, farmers and homemakers of a parone side and the government panel of resource speakers on the other to pinpoint problems confronting them and



to provide specific solutions.

One salient feature of this program is the "inter-agency cooperation approach" whereby specific problems are referred to offices or agencies concerned for appropriate action. This is one approach where specialization of services is anticipated to give necessary impetus to the program. (Ernesto F. Sagun)

### REGION 5

INCOME-GENERAT-**ING** PROJECTS

Housewives in Bicol are being trained by home management technologists to utilize and process farm products and by-products into higher value products in line with the Farming Systems in Research and Development Project (FSRDP).

Mrs. Belazon of Casiguran, Sorsogon finds coconut oil processing more profitable than copra making since other products such as nata de coco, coco jam, and coco sauce could be generated out of the processing.

It was shown that a net return of about P10 per 100 nuts could be derived in coco oil processing, which is definitely higher than copra making which gave only a net return of P2.25. If skim coco milk is processed into nata de coco, a net return of P164 could still be attained.

At present, home management specialist Amparo Borja and agricultural engineer Manuel Hizola are conducting laboratory tests to possibly lengthen storage life and improve quality

of locally produced coconut oil.

Another home-based income-generating project is peanut butter processing. Housewifecooperator Gloria Jardin of Talisay, Camarines Norte carns a monthly net income of P400 to P750 from this home industry. The others are engaged in basket making, out of coconut midribs, "bokayo" candy making, and instant salabat out of ginger and molido from sweet potato. (Emily B. Balilo)

## REGION 6

REGION 6 DIREC-TOR Emigdio L. Fabel- la disclosed that prawn feed technology developed by Southeast Asian Fishery Development Center (SEAF DEC) was tried at four different fish farming sites in Western Visayas.

The field test trials were conducted at DA demonstration farm, Leganes Research Station, UPV-BAC, Legancs, Ingore and Lapuz, all in lloilo, covering a total area of 2.3 hectares.

Closely supervised by project manager Apolonio A. Alapan of the Aquaculture Development Project, the feed technology verification study includes pond preparation, stocking and culture period up to harvest intended for small prawn farmers. The cheap prawn feed formulation consists of fish meal, shrimp meal, soybean meal, bread flour, basfin lecithin, cod liver oil, vitamin mix and Butyl hydroxy toluene. (Yelma S. Encanto)



### **REGION 8**

BY-PRODUCTS OF CACAO - Cacao, one of the indigenous crops that thrives well in the Eastern Visayas region, has many uses.

Mainly relished as hot or cold chocolate beverage, there are other beneficial by-products derived from it. Cacao vinegar is one.

Mr. and Mrs. Alfredo Ligutan of Barangay San Juan, Carigara, Leyte, claim that one jug of cacao sceds produces one gallon of cacao vinegar. The juice is extracted from the flesh of cacao seed by mercly tilting the jug full of seeds to one side and shaking it occasionally. Let it stay for a week or two until it gets sour.

Also, the newly extracted juice can be taken as a refreshing drink with a little sugar and ice.

Wine is another byproduct derived from Provincial cacao although winemaking is quite a complicated process.

be used as fuel. Its blue: Manalac to further deveflame is comparable to lop and expand his apcommercial liquefied ple orchard and to sup-

be used as organic fer- sando)

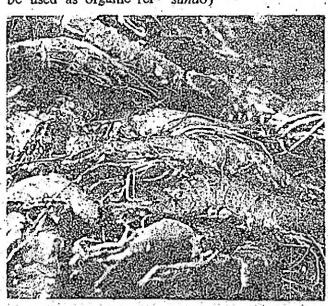
tilizer for ornamental plants, especially orchids. (Virginia S. Macanda)

#### REGION 9

GONE ARE the days when apples can be grown only in places with winter season. After conducting a series of trials, intensive analysis and studies, outstanding farmer and civic leader Jun Manalac succeeded in growing apples right in his farm in Ipil, Zamboanga del Sur, in coordination with the local DA personnel.

At this stage, his two to three-year old apple trees are now bearing fruits in commercial quantity. He is multiplying and propagating apple trees with the hope that someday commercial apple plantation can be established in the Philippines.

The Office of the Agricultural Officer Elfur J. Dinsay has extended full assistance and sup-Dried pods can also port to farmer-producer ply him with other va-Cacao pulp taken rieties for field trial: from roasted seeds can purposes. (Greg R. Er-





#### Farmers...

From page 1

scored the need for support services like loans and appropriate technology to carry out this objective. It was also mentioned that appropriate incentives, selfreliance and consistent policies are what the farmers need to realize this goal.

The regional and bureau directors and head of attached agencies presented a 5-minute report on their respective plans, programs and aceomplishments. Specific programs of action for Farmers' Profitability were also taken up.

During the conference, Secretary Dominguez expressed alarm over the extensive damage caused by the drought on the rice and corn areas. He asked for an 'assessment report on the extent of damages and recommendations.

However, in spite of the severe drought he ruled out the possibility of importing corn by saying that if we import eorn we might as well import sugar, meat, fish and even fertilizer as these commodities are a lot cheaper when imported.

. Undersecretary Emil. Ong of National Food Authority reported on his agency's role which is limited to grains price stabilization. He suggested that the Department should clarify its position in providing subsidies to farmers and should ask the National Budget Treasury to subsidize the production activities of the farmers.

The National Food Authority cited the need to have enough buffer stock to effectively implement the grains price stabilization program. The budget for procurement is placed at P3.2 B which enables NFA to buy 10 percent of total rice production and only 2 to 3 percent of total corn production.

On Sugar Regulatory Administration, Chair-Arsenio Yulo pointed out that in regard to the alleged overcapacity of the sugar mills, there is a plan to close sub-efficient sugar mills. . .

The Philippine Coconut Authority claimed that the National Coconut Replanting Program: was suspended due to inadequate funding. Ongoing programs include a P10 M National Coconut Intercropping Progand a P100 M Cocobank-PCA joint Project Agribusiness which involves cattle fattening and goat raising. Long term plans for the industry include reduction of coconut hectarage by the year 2000, increased palm oil hectarage and promotion of coconut oil for industrial use rather than for home use.

### Cory's...

From page 1

tion of the market, the stabilization of the prices of grains, the rationalization of taxes and tariffs, and the adequate provision of agricultural credit.

We destroyed the agricultural, monopolies that strangled the spirit of initiative and enterprise in the agricultural sector. We have returned the importation of wheat, wheat flour, and soybean meal to private business. We have curtailed eorn imports until local eom becomes competitive in the world market. We have decontrolled the fertilizer trade. And, as a result, the competition grown in that sector. With competition, prices have dropped. Bad for the fertilizer importer and dealer, but good for the farmer.

On grain prices, the Department of Agriculture has developed a stabilization scheme to support farmgate prices in surplus regions and stabilize them in the cities. Part of this scheme is the direct linkage of farmers and consumers. I congratulate both the Big Integrators and Farmers Organizations who are involved in this effort.

The policy proposals of the Department of Agriculture to lower the prices of farm inputs and increase the prices of farm products are being reviewed. As recommended, we have abolished export taxes, lifted the copra export ban, reduced sales taxes on fertilizers and pest-

icides, and eliminated the P10.00 surcharge on -fertilizer which was being collected to save one fertilizer company. We also liberalized the importation of fertilizer grades.

As for agricultural credit, we are about to complete a rehabilitation package for a select number of rural banks. Other proposals of the Department of Agriculture are the consolidation of loan funds for specific commodities under the Comprehensive Agricultural Loan Fund or CALF, which I hope does not grow into a milking cow.

These are only some of the policy proposals of the Department of Agriculture that government has adopted. Let me say that it enjoys my greatest confidence the integrity and competence of leadership, in the wisdom of its policies.

I have a pragmatic turn of mind. I have little patience or respect for endless theories. I shall involve myself deeply in agriculture because here the payoff can be immediate. We can see our investment in the sector reflected quickly in improved living standards for our people.

Agriculture is our first priority and our last fallback. Whatever happens, a successful agriculture means that our people will never go hungry, will always be well-fed and therefore able to keep working for a better tomorrow. Agriculture is our nation's lifeblood, whose vigor it is your special duty and privilege to protect.

Keep up the good work. You are Cory's special battalion in the fight for national re-. covery.

Thank you.

## EEC...

From page 1

Ruben Pascual noted in. a telex to Dominguez that the EEC has resorted to seeking coneessions for its member nations who are opposing the imposition of the levy.

According to Pasenal, the EEC has considered excluding marine oils from the vegetable levy coverage in an apparent move to woo Denmark, a key fish oil supplier to the EEC to change its position.

Denmark, along with Germany, Spain, Portugal, United Kingdoms and the Netherlands are opposing the levy's imposition.

Dominguez also scored the EEC for imposing trade barriers to prevent the entry of coconut products and sweet potatoes from the Philippines.

Already, the EEC has restricted the access of these products to its common market.

The restriction, Dominguez noted, can be gleaned from the levy proposal on Philippine exports and EEC's discriminatory stance in the case of sweet potatoes.

According to Dominguez, the levy would have serious implications on our farm incomes and the economy as a whole.

"The downward pressure exerted by the levy on world market prices and demand could spell the collapse of the world market and the demise of the domestie coconut industry."

The situation could become even worse for us, in the event of a trade war.'

Such war could happen if the U.S. adopts retaliatory actions against the EEC's discriminatory move. Most likely we would get caught in the middle, Dominguez said.

Sweet potato production in the Philippines has been encouraged by promise of the EEC open market and substantial offer from an EEC representative identified as the Dutch firm Granaria.

According to Dominguez, the EEC is limiting Phil. sweet potato exports to the Common Market while it has set a duty-free auota of 600,000 metric tons for the People's Republic of China.

"The Philippines is a GATT member country and should not be discriminated against in favor of non-GATT member country like PROC," Dominguez declared.

The EEC is expected to make a decision on the levy proposal in June. Once the levy is approved, the United States could retaliate and this could escalate into an international trade war in which developing countries will be caught in the cross-

Other countries to be affected by the levy are Tunisia, Moroeco, Turkey, Ivory Coast, Cameroon, Honduras, Solo-

mon Island, Chile, Peru, Panama, etc.

## President...

From page 1

partment of Agriculture since the time of former Minister Ramon Mitra.

Ansaldo, 40, who has a Baehelor Degree in Agriculture from Xavier University, Cagayan de Oro and a Masters Degree in Business Management at the Asian Institute of Management (AIM) was the former Minister of Deputy MAF and the first one to be appointed Undersecretary. filling up the post vacated by then Deputy Minister Carlos G. Dominguez.

Barbosa, 53, a San Beda College law graduate and a practicing lawyer, was assistant secretary for Administration and Finance.

Fernandez, 47,a Doctorate in Anthropology from University of California, was assistant secretary for Special Projects.

Gozun, 36, a Diplomate in Agribusiness Management from the University of the Philippines, was assistant secretary for Attached Administrative-Supervised Agencies.

Bautista, a University of Santo Tomas Journalism graduate, was the assistant secretary for Field Operations.

#### Clear cut...

From page 1

emphasized minguez that the primary objective of the government is to promote social justice through gainful productive employ-. ment which could be enhanced by sustainable growth and development.

Speaking before some Baguio Country Club which include fisheries regional directors, representatives from fishermens' groups, private sector, law enforcement people, businessmen, and other fish industryrelated agencies, Dominguez cited the need to formulate policies, the infusion of public investments and support services to draw private initiative into marketing of agricultural goods. This means, he added, that the present administration is determined to finetune all its programs in pursuit of the welfare of the millions of small farmers and fishermen.

Bureau of Fisheries and. Aquatic Resources Director Juanito B. Malig said that the conference hopes to formulate a progressive and realistic fisheries develop-, ment policy and program attuned to the needs of the time.

He added that there is an urgent need to restudy the present policy concerning the fishing industry to make it responsive and relevant to the people's need.

## Dominguez...

From page 1

stock and Poultry Caravan Fair '87, Secretary Dominguez stressed the importance of securing first the profitability of farmers in order to attain a fighting form as a nation in the international market.

Philcite Managing. Director José Luis Yulo Ir. cited the need to bring out to the regions agricultural trade fairs and exhibitions as the private sector commitment to agricultural development program.

### IPM...

From page 2

monitoring and evaluation of the IPM's program in controlling pests and diseases and its impact on farmers profitability. It also recommended that special funds, aside from regular appropriations, be allocated to ensure immediate and sustained conduct of research, training and strategie extension eampaign.

Mr. Jesus Sumangil, chief of the Crop Protection Division, Bureau of Plant Industry, who is also the National Program Officer of the Philippine German Crop Protection Program. presented a summary of 200 participants at the three-day workshop to Undersecretary

About 40 papers were presented during the workshop which include the status and recent advances in integrated pest management technology for certain pests in crops like rice, corn, legumes, vegetaand plantation crops like sugarcane, coconut, cacao and citrus. The participants also . stressed the need for a ... more sustained and wider implementation of the IPM technology.

DA... From page 2

small farmers and fishermen."

> The CALF was estab-Next page please

lished through Executive Order No. 113 on December 24, 1986. Seventeen (17) funding programs totalling about P500 Million were consolidated to ensure efficiency in the administration and distribution of agri-funds towards small farmers and entrepreneurs. This is "a departure from crop-specific loan programs to a more general type of lending depending on what borrowers really need and that banks want to support." Dominguez added.

The P100 Million fund alloted to GFSME will be utilized primarily as guarantee cover. GFSME, however, will place a ceiling of P500,000.00 per bor-

rower to ensure a con-paralyzing losses placed centration of smallscale entrepreneurs, A group of related accounts in turn may borrow up to P15,000,000. A selected number of rural banks recently accredited by GFSME.will also be tapped to distribute this special guarantee scheme in addition to a network of financial institutions already availing of GFSME programs.

## El Niño ...

From page 2

nine months.

The period that experienced severe agricultural setbacks was 1982-1983. El Nino had gripped the world with intense devastation with at US\$ 10 billion worth of agricultural crops.

This year's El Nino nightmare, according to the officials of the Phil-Atmospheric, ippine Geophysical and Astronomical Services Administration · (PAG-ASA), is the tenth occurrence since 1935. PAGASA predicts that . if the dry spell this year persists up to June or July, economic losses will be greater.

#### National..

From page 2

seeds as most of our farmers have been using low quality seeds for the last thirty years, disclosed Ms. Erlinda Sevilla, chief of BPI Seed Quality Control Services and Program Coordinator of the training program. In case of rice, only about 8% of an estimated 3 million hectares riceland is served by the actual production of the certified seeds."

Using certified seeds improves the yield because of its high generic purity, high germination capacity, vigor of the seeds and minimal presence of weed-seeds.

"To develop a market oriented commodity, the farmers have to use improved seeds to increase production and hopefully increase their incomes," she continued.

Sevilla further stressed that production yield would increase from 10 to 15 percent without applying fertilizer with the use of improved seeds which are pest resistant and high yielding, "No amount of fertilizer and water will have an effect on the seeds unless the potential is inherent in the seeds. By changing the seeds used by the farmer, we can increase his yield without any other input," disclosed Sevilla.

The components of the Seed Program are; 1) variety development, 2) seed production. 3) seed quality control, 4) seed processing, 5)research and 6) marketing and distribution.

The training course was a joint sponsorship of the BPI and FAO! DANIDA and was attended by 30 extension workers from DA.

### Out put...

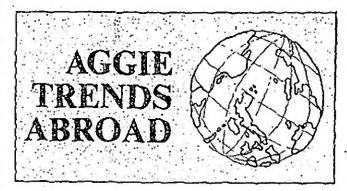
From page 2

existing farmgate price of P3.50 per kg., corn crop losses would reach about P190.88 million.

Palay areas affected totalled 14,030 hectares with output decrease of 22,254 metric tons worth P77.8 million.

 For the last three months, Bicol region had suffered aggie production setbacks due to the El Nino drought. A total of 12,756 hectares had already been affeeted by drought which has resulted in an estimated loss of 633,746 cavans of rice and 1,185 metric tons of rootcrops valued at P87,346,280. About 4,487 heetares of cornland with erop potential decline of 179.057 cavans worth over P30 million have been affected.

Pedro Oco Jr., chief of the Operations Division, DA region 5, said El Nino is the second biggest drought to have hit the Bicol region,



Thailand

#### Vertical Integration in Duck Farming

Bangkok Ranch Limited in Samut, Prakarn is distributor of different duck breeds.

The company whose original business is collecting and cleaning feathers for export is also engaged in buying duck feathers from local farmers for processing as export product. It has built a vertically integrated duck farm, undergoing the whole operation from broiler duck raising to meat processing and feather production.

The company has a replacement program for every five months. Out of 10,000 stock, 70 per cent is rearing baby parent stock and 3,000 adult birds for laying eggs. Parent stock laying is expected to reach 5,000 eggs per day.

Australia

#### More rice, less water

Australian researchers are examining the possibility of growing rice with less water requirement.

The research is being undertaken at the University Queensland's Redland Bay research farm under the supervision of Dr. Shun Fukai, senior lecturer at the University's Department of Agriculture.

One of the main areas of research involves the investigation of root development in plants for this is the key factor in determining success or failure of rice varieties in a dry environment.

Israel

#### Poultry Bell Drinker

A new innovation on poultry equipment is a bell drinker which includes advanced 'drop indrop out' valve engineering; individual water control; bayonet bell-based for 'twist of the wrist' valve attachment; and convenient handle hook for easy movement. This bell drinker can serve a dayold to market day-old chickens.

Considered to be a major step in cage drinker. technology, the Cage Cup boasts a leakproof spring-sealed valve and facilitates fast and easy installation. This bell drinker is designed to keep the cup clean and maintain water level while the litter remains dry.

Sri-Lanka

#### Test Tube Coconut Seedlings

Agricultural scientists successfully produced coconut seedlings in test tubes by culturing embryos and corn cobs treated with fungus to control pests without using chemical pesticides. They also raised coconut plantlets from embryos grown in test tubes. Attaining these successes, they are now engaged in producing coconut plants from pieces of leaf tissues.

## BUREAU OF AGRICULTURAL ECONOMICS DAIR UPDAIC WHOLESALE PRICES OF SELECTED COMMODITIES IN MAJOR TRADING CENTERS

			Ap	ril 6-10	, 1987	,							
	Metro Manila		Cabanatuan		Cebu		Davao		Cag, de Oro				
Commedity													
	Low	High	Low	High	Low	High	Low	High	Low	High			
Rice (per kilo)							:		•				
Special	6.40	6.80	6.10	6.20	6.00	6.50			5.40	5.80			
Ordinary	5.30	5.50	4.80	5.70	5.10	5.50	. 5.00	5.30	5.20	5.35			
Vegetables (per	kilo)	' 1							2.50				
Amargoso	1.33	7.00b	3.00	4.50	3.00	3.50		6.00	3.00	3.50			
Sitao	4.00	10.00	*		6.00	7.00		6.00	1.80	3.00			
Garlic	12.00	10.00 <sup>b</sup> 22.00	15,00	18,00	19.00	21.00	20.00	25.00	25.00	28.00			
Onion bulb			0.00	2 22	6.00		C 00	7.00	6.00	8.00			
(red) 2.50		7.00	2.80	3.20	5.00	6.00		7.00					
Tomato	0.80	1.50	1.00	1,50	4.00	5.00	3,00	6.00	3.20	3.80			
Fruits (per piece	<b>:</b> )												
Ripe Banana													
Latundan	0.25	0.35	0.40	0.48	*	**	0.12	0.15	0.13	0.20			
Bungulan	0.25	0.35	*	*	*	*	*	<b>*</b>	0.20	0.25			
Lakatan	0.30	0.45	0.60	0.70	•	•	0.15	0.20	0.22	0.30			
Papaya	6.00	8.00	*	*	•.	*	4.00	5.00		*			
Poultry (per pie	ce)	•											
Broiler (live)	24.00	26.00	*	*	27.00	28.00	35.00	36.00	*	*			
Eggs, white ·leghorn	1.08	1.11	*		1.00	1.10	1:45	1.50	1.18	1.24			
·16gnorn	1.00	1.11		•	1.00	4.10	112	1.00					
Fish (per kilo)				22.00	16.00	20.00	22.00		22.00	24.00			
Bangus	16.67								23,00				
Galunggong	4.00	11.11.	14.00	18.00	10.00	13.00	15.00	2 V. U V	12.00	14.00			

a Newly harvested bulbs.

b · Low supply.

The Bureau of Agricultural Statistics (BAS) is the former Bureau of Agricultural Economics (BAEcon) which has undergone reorganization to coordinate all agricultural statistics in the country. Under the new mandate, the BAS among others is called upon to establish and maintain the operation of a comprehensive agricultural marketing service which provides information on prices, markets, commodity volumes, market situations and outlook.

The BAS gathers wholesale and retail prices of 135 agricultural commodities from 18 wet markets and 5 supermarkets in Metro Manila and 64 provincial trading centers. Frequency of price collection is thrice a week or every Monday, Wednesday and Friday from 5 to 9 a.m.

Wholesale prices of fish, fruits, vegetables and poultry are taken from the trading centers; those for palay, rice, corn grains and corn grits from operators of bonded warehouses/bodegas or from rice and corn millers; while those for cattle, hogs and poultry from livestock and poultry dealers. On the other hand, retail price collection is confined to stallhouders in the sample public

markets Oata processing and dissemination take place almost simultaneously at BAS Central Office in Quezon City and the provincial operation centers. The provincial operation centers disseminate prevailing prices and price ranges to local commercial radio stations. The central office publishes the prevailing prices in Metro Manila and provincial trading centers in the AMNEWSS Price Bulletin wich is disseminated to selected broadcast and print media, government and private offices and other major users.

Please address all communications/inquiries to the Director, Bureau of Agricultural Statistics, Ben-Lor Building, Quezon Avenue, Quezon City; or to the Officer-in-Charge, BAS provincial opera-

tion centers.

## PITAK FILIPINO

## Magtanim ng Pakwan

Ni Pacita M. Espejo

TUWING SASAPIT ang tag-araw, dagsaan na naman ang katakamtakam na prutas — ang pakwan. Lahat na bahagi nito ay nakakain — laman, balat at buto. Ito'y isang pananim na galing pa sa Africa. Mahal ito lalo na't hindi sa panahon.

Nuong 1982-83, mayroon nang 15,410 ektaryang natamnan ng pakwan at ang kabuuang
produksiyon ay 75,600
metriko tonelada. Subalit nuong 1983-84, lumiit ang lawak na ito at
naging 5,370 ektarya na
lamang at bumaba rin
ang produksiyon sa
57,000 metriko tonelada, Malaki ngayon ang

pangangailangan sa pakwan dahil maraming bansa ang ibig bumili nito sa atin. May alok mula sa Estados Unidos na bibilhin ang lahat ng ani nating pakwan.

Ang karaniwang uring itinatanim dito ay ang Valencia, Meak, Klondyke, Klondyke Stripe, Imperial 45, Dixie Queen, New Hampshire, Midget, Northern Hybrid, Tender Sweet, Honey Cream at Mallorea.

Mayroon ding uring galing sa ibang bansa, gaya ng Accessions 193490 at 293964 mula sa Africa, Accessions 183217 at 164539 mula sa India; Festival Queen, Glory, Charleston Gray

at Sugar Baby. Malalaki ang bunga nito.

#### PARAAN NG PAGTATANIM

Nakatutubong mabuti ang pakwan sa lupang buhaghag na mayaman sa organikong pataba at hindi pa natatamnan ng pakwan. Di-tulad ng ibang pananim, ang pakwan ay nabubuhay nang masigla kapag may hangin kaya kailangan nito ang may mahusay na paagusan ng tubig upang maging sagana sa ani

Tumutubo rin itong mabuti sa lupang may 5.0-6.8 pH (kaasiman ng lupa). Gusto nito ang mahaba at mainit na pa-

Karaniwan itong itinatanim sa kababaan, pagkaani ng palay, gaya sa Bataan, Bulacan, Pampanga, Tarlac, Nueva Ecija, Rizal, Batangas at Laguna. Maitatanim ito mula Oktubre hanggang Enero. Subalit

nahon at ang tempera-

turang 25°C hanggang

30°C lalo na sa panahon

ng pamumulaklak.

eva Ecija, Rizal, Batangas at Laguna. Maitatanim ito mula Oktubre hanggang Enero. Subalit mayroong nagtatanim nito simula pa ng Agosto upang makaani nang wala pa sa panahon at maihabol sa mataas na

presyo.

Araruhin at suyurin ang lupa nang 20 sentimetrong lalim, 2 hanggang 3 beses ilan linggo bago magtanim. Magtanim ng 3 hanggang 4 na binhi sa butas na 2.5 sentimetrong lalim sa bawat tundos. Gawing  $1.5 \times 1.5$  hanggang 2.5 x 2.5 metrong pagitan batay sa uring itatanim. Kapag sumibol ang binhi, bawasan ito at mag-iwan lamang ng isa hanggang dalawang malulusog na tanim. Maglinang upang hindi makatubo ang mga damo ngunit pag-ingatang huwag mapipinsala ang mga ugat. Napipinsala ang mga pananim kapag nataon sa mahabang tagtuyot. Patubigan ang bukid nang 5 hanggang 6 na ulit habang lumalaki ang mga pananim. Habang maliliit pa ang pananim, kaunti lamang ang patubig pagkat kung labis-labis ito, hindi makatutubong mabuti ang mga ugat.

Karaniwang itinatanim ang pakwan bilang panghalili sa ibang pananim kaya kailangan nito ang organikong abono. Maglagay ng 10 hanggang 15 toneladang dumi ng hayop sa bawat ektarya. Ilagay sa pamamagitan ng kamay ang lahat ng "complete fertilizer" kasabay ng pagtatanim nang 5 hanggang 8 sentimetrong lalim at sa paligid ng binhi nang 5 hanggang 6 na sentimetrong layo mula dito. Maglagay ng 100 hanggang 150 kilong abono sa bawat ektarya.

#### Mga Mapaminsalang Insekto

Cucurbit beetle — kinakain nito ang mga dahon ng pananim. Upang masugpo ito, magbomba ng Carbaryl o Malathion sa daming 3 kutsara sa bawat galong tubig.

Aphids - napakaliliit na insektong sumisipsip.

sa katas ng dahon. Puk-sain ito sa pamamagitan ng pagbobomba ng Eka-tin sa daming isang kut-sara sa bawat 3 galong tubig.

Mites — napakaliliit na insektong matatagpuan sa ilalim ng dahon at upang mapuksa ito, magbomba ng Chlorobenzilate, Kelthane, Tedion V. 18 sa daming 2-3 kutsara bawat 5 galong tubig.

long tubig.

Ang "downy mildew" ay sakit na namiminsala sa pakwan. Sugpuin ito sa pamamagitan ng pagbobomba ng alinman sa mga sumusunod:

1) Fernate - 3½ kutsara sa bawat galong tubig

2) Zerlate – 1½-2 kutsara sa bawat galong tubig

3) Manzate - 1½ kutsara sa bawat galong tubig.

#### **PAG-AANI**

Anihin ang mga bunga kung magulang na para matamis. Karaniwang naaani ang bunga pagkaraan ng 35 hanggang 40 araw pagkapamulaklak. Pag-ingatan ang pag-aani nang hindi masugatan ang bunga.

## Kabute sa inyong hapag-kainan

ANG KABUTING saging, bukod sa masarap, ay masustansiyang pagkain na maaaring patuouin sa mainit o tropikal na lugar.

Ayon sa mananalik-sik, ang 100 gramong kabute ay sapat nang magdulot ng kailangang bitamina at mineral ng isang tao para sa isang araw. Ito'y mainam na pagkain para sa taong mataas ang presyon dahil sa wala itong kolesterol. Higit sa lahat, ang kabute ay makatutulong upang malunasan ang kakulangan ng pagkain dito sa ating bansa.

Buhat sa Rehiyon 3, ang Regional Laboratory ng Kagawaran ng Pagsasaka sa San Matias, Sto. Tomas, Pampanga ay patuloy ang paggawa ng semilya ng kabute para maipagbili sa sinumang interesadong magpatubo nito.

Mga Payo sa Pagpapasibol ng Kabute

Ang lugar na pagtataniman ng kabute ay dapat nalililiman at hindi nakabilad sa araw at sapol sa hangin. Pumili ng matabang lupa na ligtas sa anay, langgam at ibang peste.

Tulad ng kama ng gu-

lay, gumawa ng pundasyon na lupang may 2 talampakan ang lapad at I metro o higit pa ang haba. Gumawa ng kanal ang paligid ng kama may 6 na pulgada ang lapad at 6 na pulgada ang lalim. Labindalawang oras bago tamnan ito, diligin ng pinaghalong isang kutsarang Benlate at 1 kutsarang Azodrin bawat 5 galong tubig. Itabi ang kalahati ng solusyon para pandilig sa kamang may tanim na.

Ang kama ng kabute ay maaari ring nakalagay sa isang patungan. Pumili ng papag o bangko na may 2 talampakan ang lapad at 1 metro ang haba. Sapinan ito ng plastik o sako at ang paraan ng pagtatanim at pangangalaga ay tulad rin ng sa kamang nasa lupa.

Para sa isang kama ng kabute na may 2 metrong haba at 1 talampakan ang lapad, narito ang mga kailangang gamit: 150 bigkis ng tuyong dahon ng saging o binunot na puno ng dayami may 1 talampakan ang haba at 4 hanggang 5 pulgada ang lapad, 6 na metrong plastik o 6 na supot na plastik ng abono o asu-

kal, l kutsarang Benlate at l kutsarang Azodrin, sprayer o rigadera, l bote ng milya 500 ee dextrose bottle, lumang diyaryo o magasin, at l kutsarang urea.

#### PARAAN NG PAGTATANIM

Ibabad ang mga bigkis ng dahon o dayami sa tubig sa loob ng 12 hanggang 24 oras. Pabayaang tumulo ang sobrang tubig bago ihanay sa kama. Ilatag nang pahalang sa kama ang mga 25 bigkis ng dayami. Itanim sa palibot ng unang hanay ang semilya sa lalim na l pulgada, 3 pulgada mula sa gilid at 4 hanggang 5 pulgada ang layo sa bawa't isa. Sa 150 bigkis ng dahon, makakagawa ng 6 na hanay o sapin. Diligin ang paligid ng kama ng 1/2 kutsarang Benlate at 1/2 kutsarang Azodrin na tinunaw sa 2 galong tubig.

Ang kamang dahon ng saging ay binabalot nang husto ng plastik samantalang ang kamang dayami ay tinatakpan lamang ng plastik at hindi binabalutan nang husto. Inaalisan ito ng takip tuwing hapon

sa loob ng isa hanggang dalawang oras para sumingaw ang sobrang init.

Ang pinakamabuting panahon ng pag-aani ng bunga ay kapag ang pinakapayong ng kabute ay nag-uumpisang lumabas na sa balot. Huwag gumamit ng gunting o kutsilyo, kundi dahandahang hilahin nang paikot ang kabute at alisin ang anumang laman ng bunga na maiiwan sa dahon.

Maaaring umani sa loob ng 3 araw sa unang pagsibol. Pagkatapos nito, diligin ang kama at takpan. Sisibulan muli ito sa ika-7 hanggang 10 araw.

Ang kama ng kabute ay pakikinabangan sa loob ng 1 hanggang 1-½ buwan. Palitan ang kama kapag ito'y mabulok na. Magagamit ang pinagtamnang dahon o dayami bilang kompost o pataba sa lupa.

Ang isang kamang may 2 metro ang haba at 6 na sapin ay mapagaanihan nang di-kukulangin sa 4 na kilong kabute. Sa kasalukuyan, ang kabuting saging ay mabibili sa halagang P25 hanggang P30 bawat kilo.

## Nagsanay sa mga Proyektong pagkakakitaan

BALER, AURORA. Isang hasik-pandayan (seminar) ukol sa "eatering service" at "eoconut utilization and processing," ang idinaos kamakailan sa bayang ito na itinaguyod ng Kagawaran ng Pagsasaka.

Ito ay dinalulian ng dalawang grupo na pawang mga ina at kasapi ng Rural Improvement Club sa Barangay Suclayin at Poblacion, Aurora.

Layon ng seminar na sanayin ang mga kababaihan sa pagtatatag ng mga proyektong pagkakakitaan, tulad ng eatering service, paggawa ng sabon mula sa niyog,

eoco jam, at coco vinegar, sabi ni Senior Home Management Technologist Elsa J. Gomez.

Binigyang-diin nina Gng. Magnolia I. de los Reyes, Home Economies Extension Specialist 1, at Gng. Fely Gabriel, regional training officer, na sa pamamagitan ng proyektong ito, mapaglalapit ang damdamin ng sambayanan sa pamahalaan.

Pinapurihan ni Provincial Agricultural Officer Asislo N. Nuestro ang katangi-tanging seminar sa pagsasagawa ng mga gawaing pangkabuhayan upang mapaunlad ang pamayanan, lalo na sa kabukiran. (Liw-liwa S. Sanchez)

